

ABSTRACT OF THE DISCLOSURE

A communication channel delivers a binary signal representing a data sequence by a pattern of high and low logic levels (symbols) from a transmitter to a receiver. The communication channel low-pass filters the transmitter output signal (VX) so that the signal (VR) arriving at the receiver is a distorted version of the transmitted signal. A receiver processes the received signal to produce an output first data signal (Z) representing the sequence of symbols conveyed by the transmitted signal. The receiver filters the received signal with a transfer function controlled by a control signal to produce a compensated signal (X). The receiver responds to trailing edges of the sampling clock signal by driving the first data signal to a succession of first states, wherein each first state corresponds to a separate leading edge of the sampling clock signal and represents a magnitude of the compensated signal on occurrence of the first state's corresponding sampling clock signal leading edge. The receiver also responds to trailing edges of the sampling clock signal by generating a second data signal by driving the second data signal to a succession of second states. Each second state corresponds to a separate trailing edge of the sampling clock signal and represents a magnitude of the compensated signal on occurrence of the second state's corresponding sampling clock trailing edge. The receiver generates the filter control signal as a function of the first and second data signals.